



RECEIVED  
MAY 21 2003  
TECH CENTER 1600/2600  
#15

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/913,955A

DATE: 05/16/2003  
TIME: 09:34:57

Input Set : A:\16335.app  
Output Set: N:\CRF4\05162003\I913955A.raw

3 <110> APPLICANT: CRINE, PHILIPPE  
4 BOILEAU, GUY  
6 <120> TITLE OF INVENTION: COMPOSITION, METHODS AND REAGENTS FOR THE SYNTHESIS OF  
7 A SOLUBLE FORM OF HUMAN PHEX  
9 <130> FILE REFERENCE: 163-35  
11 <140> CURRENT APPLICATION NUMBER: 09/913,955A  
12 <141> CURRENT FILING DATE: 2001-08-21  
14 <150> PRIOR APPLICATION NUMBER: PCT/CA00/00201  
15 <151> PRIOR FILING DATE: 2000-02-24  
17 <150> PRIOR APPLICATION NUMBER: CA 2,262,056  
18 <151> PRIOR FILING DATE: 1999-02-24  
20 <160> NUMBER OF SEQ ID NOS: 6  
22 <170> SOFTWARE: PatentIn Ver. 2.1  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 749  
26 <212> TYPE: PRT  
27 <213> ORGANISM: Homo sapiens  
29 <400> SEQUENCE: 1  
30 Met Glu Ala Glu Thr Gly Ser Ser Val Glu Thr Gly Lys Lys Ala Asn  
31 1 5 10 15  
33 Arg Gly Thr Arg Ile Ala Leu Val Val Phe Val Gly Gly Thr Leu Val  
34 20 25 30  
36 Leu Gly Thr Ile Leu Phe Leu Val Ser Gln Gly Leu Leu Ser Leu Gln  
37 35 40 45  
39 Ala Lys Gln Glu Tyr Cys Leu Lys Pro Glu Cys Ile Glu Ala Ala Ala  
40 50 55 60  
42 Ala Ile Leu Ser Lys Val Asn Leu Ser Val Asp Pro Cys Asp Asn Phe  
43 65 70 75 80  
45 Phe Arg Phe Ala Cys Asp Gly Trp Ile Ser Asn Asn Pro Ile Pro Glu  
46 85 90 95  
48 Asp Met Pro Ser Tyr Gly Val Tyr Pro Trp Leu Arg His Asn Val Asp  
49 100 105 110  
51 Leu Lys Leu Lys Glu Leu Leu Glu Lys Ser Ile Ser Arg Arg Arg Asp  
52 115 120 125  
54 Thr Glu Ala Ile Gln Lys Ala Lys Ile Leu Tyr Ser Ser Cys Met Asn  
55 130 135 140  
57 Glu Lys Ala Ile Glu Lys Ala Asp Ala Lys Pro Leu Leu His Ile Leu  
58 145 150 155 160  
60 Arg His Ser Pro Phe Arg Trp Pro Val Leu Glu Ser Asn Ile Gly Pro  
61 165 170 175  
63 Glu Gly Val Trp Ser Glu Arg Lys Phe Ser Leu Leu Gln Thr Leu Ala  
64 180 185 190  
66 Thr Phe Arg Gly Gln Tyr Ser Asn Ser Val Phe Ile Arg Leu Tyr Val

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/913,955A

DATE: 05/16/2003

TIME: 09:34:57

Input Set : A:\16335.app

Output Set: N:\CRF4\05162003\I913955A.raw

```

67          195          200          205
69 Ser Pro Asp Asp Lys Ala Ser Asn Glu His Ile Leu Lys Leu Asp Gln
70          210          215          220
72 Ala Thr Leu Ser Leu Ala Val Arg Glu Asp Tyr Leu Asp Asn Ser Thr
73 225          230          235          240
75 Glu Ala Lys Ser Tyr Arg Asp Ala Leu Tyr Lys Phe Met Val Asp Thr
76          245          250          255
78 Ala Val Leu Leu Gly Ala Asn Ser Ser Arg Ala Glu His Asp Met Lys
79          260          265          270
81 Ser Val Leu Arg Leu Glu Ile Lys Ile Ala Glu Ile Met Ile Pro His
82          275          280          285
84 Glu Asn Arg Thr Ser Glu Ala Met Tyr Asn Lys Met Asn Ile Ser Glu
85          290          295          300
87 Leu Ser Ala Met Ile Pro Gln Phe Asp Trp Leu Gly Tyr Ile Lys Lys
88 305          310          315          320
90 Val Ile Asp Thr Arg Leu Tyr Pro His Leu Lys Asp Ile Ser Pro Ser
91          325          330          335
93 Glu Asn Val Val Arg Val Pro Gln Tyr Phe Lys Asp Leu Phe Arg
94          340          345          350
96 Ile Leu Gly Ser Glu Arg Lys Lys Thr Ile Ala Asn Tyr Leu Val Trp
97          355          360          365
99 Arg Met Val Tyr Ser Arg Ile Pro Asn Leu Ser Arg Arg Phe Gln Tyr
100          370          375          380
102 Arg Trp Leu Glu Phe Ser Arg Val Ile Gln Gly Thr Thr Thr Leu Leu
103 385          390          395          400
105 Pro Gln Trp Asp Lys Cys Val Asn Phe Ile Glu Ser Ala Leu Pro Tyr
106          405          410          415
108 Val Val Gly Lys Met Phe Val Asp Val Tyr Phe Gln Glu Asp Lys Lys
109          420          425          430
111 Glu Met Met Glu Glu Leu Val Glu Gly Val Arg Trp Ala Phe Ile Asp
112          435          440          445
114 Met Leu Glu Lys Glu Asn Glu Trp Met Asp Ala Gly Thr Lys Arg Lys
115          450          455          460
117 Ala Lys Glu Lys Ala Arg Ala Val Leu Ala Lys Val Gly Tyr Pro Glu
118 465          470          475          480
120 Phe Ile Met Asn Asp Thr His Val Asn Glu Asp Leu Lys Ala Ile Lys
121          485          490          495
123 Phe Ser Glu Ala Asp Tyr Phe Gly Asn Val Leu Gln Thr Arg Lys Tyr
124          500          505          510
126 Leu Ala Gln Ser Asp Phe Phe Trp Leu Arg Lys Ala Val Pro Lys Thr
127          515          520          525
129 Glu Trp Phe Thr Asn Pro Thr Thr Val Asn Ala Phe Tyr Ser Ala Ser
130          530          535          540
132 Thr Asn Gln Ile Arg Phe Pro Ala Gly Glu Leu Gln Lys Pro Phe Phe
133 545          550          555          560
135 Trp Gly Thr Glu Tyr Pro Arg Ser Leu Ser Tyr Gly Ala Ile Gly Val
136          565          570          575
138 Ile Val Gly His Glu Phe Thr His Gly Phe Asp Asn Asn Gly Arg Lys
139          580          585          590

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/913,955A

DATE: 05/16/2003

TIME: 09:34:57

Input Set : A:\16335.app

Output Set: N:\CRF4\05162003\I913955A.raw

```

141 Tyr Asp Lys Asn Gly Asn Leu Asp Pro Trp Trp Ser Thr Glu Ser Glu
142      595      600      605
144 Glu Lys Phe Lys Glu Lys Thr Lys Cys Met Ile Asn Gln Tyr Ser Asn
145      610      615      620
147 Tyr Tyr Trp Lys Lys Ala Gly Leu Asn Val Lys Gly Lys Arg Thr Leu
148 625      630      635      640
150 Gly Glu Asn Ile Ala Asp Asn Gly Gly Leu Arg Glu Ala Phe Arg Ala
151      645      650      655
153 Tyr Arg Lys Trp Ile Asn Asp Arg Arg Gln Gly Leu Glu Glu Pro Leu
154      660      665      670
156 Leu Pro Gly Ile Thr Phe Thr Asn Asn Gln Leu Phe Phe Leu Ser Tyr
157      675      680      685
159 Ala His Val Arg Cys Asn Ser Tyr Arg Pro Glu Ala Ala Arg Glu Gln
160      690      695      700
162 Val Gln Ile Gly Ala His Ser Pro Pro Gln Phe Arg Val Asn Gly Ala
163 705      710      715      720
165 Ile Ser Asn Ser Glu Phe Gln Lys Ala Phe Asn Cys Pro Pro Asn
166      725      730      735
168 Ser Thr Met Asn Arg Gly Met Asp Ser Cys Arg Leu Trp
169      740      745
172 <210> SEQ ID NO: 2
173 <211> LENGTH: 20
174 <212> TYPE: PRT
175 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 2
178 Val Gly Gly Thr Leu Val Leu Gly Thr Ile Leu Phe Leu Val Ser Gln
179 1      5      10      15
181 Gly Leu Leu Ser
182      20
185 <210> SEQ ID NO: 3
186 <211> LENGTH: 20
187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Human PHEX
192      derivative
194 <400> SEQUENCE: 3
195 Val Leu Thr Val Ile Ala Gln Gln Thr Thr Leu Phe Leu Val Ser Gln
196 1      5      10      15
198 Gly Leu Leu Ser
199      20
202 <210> SEQ ID NO: 4
203 <211> LENGTH: 16
204 <212> TYPE: PRT
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Description of Artificial Sequence: Human PHEX
209      derivative
211 <400> SEQUENCE: 4

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/913,955A

DATE: 05/16/2003

TIME: 09:34:57

Input Set : A:\16335.app

Output Set: N:\CRF4\05162003\I913955A.raw

212 Val Leu Thr Val Ile Ala Gln Gln Thr Thr Ser Gln Gly Leu Leu Ser  
213 1 5 10 15  
216 <210> SEQ ID NO: 5  
217 <211> LENGTH: 52  
218 <212> TYPE: DNA  
219 <213> ORGANISM: Artificial Sequence  
221 <220> FEATURE:  
222 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer  
224 <400> SEQUENCE: 5  
225 ctgacagtga tcgctcaaca aacaaccagt caaggtctct taagtctcca ag 52  
228 <210> SEQ ID NO: 6  
229 <211> LENGTH: 51  
230 <212> TYPE: DNA  
231 <213> ORGANISM: Artificial Sequence  
233 <220> FEATURE:  
234 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer  
236 <400> SEQUENCE: 6  
237 gggtgtttgt tgagcgatca ctgtcaggac aaacacgacc agggcaattc g 51

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/913,955A

DATE: 05/16/2003

TIME: 09:34:58

Input Set : A:\16335.app

Output Set: N:\CRF4\05162003\I913955A.raw